

S/196/61/000/011/024/042
E194/E155

AUTHORS: Poznyak, E.L., and Raykhлина, B.B.

TITLE: Determination of critical speeds of high-speed
electrical machines

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika,
no.11, 1961, 4, abstract 11I 27. (Vestn. elektroprom-
sti, no.7, 1961, 10-16)

TEXT: The article describes a method of calculating critical
speeds allowing for the elasticity and mass of the frame and
support structures. The method is based on numerical integration
of the differential equation of oscillation of a beam using a
digital computer. Examples are given of calculations with
allowance for the elasticity of ball-bearings. Experimental
results are given.
5 illustrations. 5 literature references.

[Abstractor's note: Complete translation.]

Card 1/1

✓

POZNYAK, E.L.

Stability of rotors having anisotropic properties. Prob.proch.v
mashinostr. no.7:58-74 '62. (MIRA 15:4)
(Rotors)

POZNYAK, E.L. (Moskva)

Damping of self-exciting vibrations of rotors in sliding
bearings. Izv. AN SSSR. Mekh. no.3:62-76 My-ja '66.
(MIRA 18:7)

L 09973-67 EWT(m) DJ/GD
ACC NR: AT6028946

SOURCE CODE: UR/0000/66/000/000/0353/0367

AUTHOR: Poznyak, E. L. (Candidate of technical sciences)

44

ORG: none

TITLE: Vibration-proof journal bearings

SOURCE: Dinamika mashin (Dynamics of machinery); sbornik statey. Moscow, Izd-vo Mashinostroyeniye, 1966, 353-367

TOPIC TAGS: bearing stability, journal bearing, mechanical vibration, lubricating oil, pressure, lubricant viscosity

ABSTRACT: This paper presents a theoretical analysis of the properties of vibration-proof noncircular bearings, as applied to vibration-proof bearings with fixed working surfaces. It is assumed that the bearings have infinite length. The initial equation for the load capacity of the bearing and the curve of dynamic equilibrium is the Reynolds equation in dimensionless form

$$\frac{d}{dx} \left(h^3 \frac{dp}{dx} \right) = 6 \frac{dh}{dx},$$

where h and p are the thickness of the layer and the pressure, which are equal to

$$h = \frac{N}{A}, \quad p = \frac{\rho' d s}{\mu w},$$

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L 09973-67

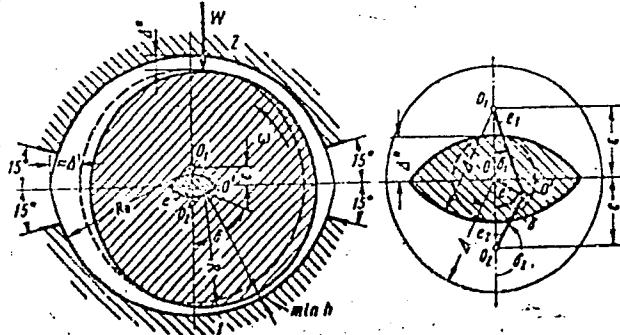
ACC NR: AT6028946

Here h' and p' are the dimensional values of the layer thickness and pressure; Δ is the characteristic radial gap; $\psi = \Delta/R$ is the relative gap; and μ is the coefficient of dynamic viscosity. The load factor is found from the expression

$$\zeta = \frac{q\ell^3}{\mu w} = -\frac{1}{2} \int p \cos x dF,$$

where $q = W/2R\ell$ is the specific load; W is the vertical load on the journal; and ℓ and R are the length and radius of the journal. Double-center bearings, triple-key bearings, and bearings with bushings shifted in the plane of the joint are also examined (see Fig. 1).

Fig. 1. Double-center bearing.



Comparison of the various types of bearings shows that, for the same thickness of the

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"APPROVED FOR RELEASE: 03/14/2001

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L 09973-67
ACC NR: AT6028946

oil layer and a small load, three-key bearings are more stable than double-center bearings; under a greater load, double-center bearings are more stable. Orig. art. has: 24 formulas, 7 graphs, and 3 diagrams.

SUB CODE: 13// SUBM DATE: 21Apr66/ ORIG REF: 006/ OTH REF: 006

Card 3/3 b7c

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001342820016-4"

POZNYAK, E.L., kand.tekhn.nauk

Vibration-proof sliding bearings. Vest.mashinostr. 45
no.10:29-34 O '65.

(MIRA 18:11)

L 63033-65
ACCESSION NR: AP5016232

UR/0373/65/000/003/0068/0076

3
P

AUTHOR: Poznyak, E. L. (Moscow)

TITLE: Damping of self-excited oscillations of rotors supported on bearings

SOURCE: AN SSSR. Izvestiya, Mekhanika, no. 3, 1965, 68-76

TOPIC TAGS: rotor stability, rotor whirl, flexible rotor stability/ VNIIEM 1 computer

ABSTRACT: The problem of a symmetrical elastic shaft rotating at constant ω (with a central balanced disk mass M) supported on two identical bearings connected through parallel springs and dampers to a rigid foundation was theoretically investigated (see Fig. 1 on the Enclosure). The bearing support masses, spring constants, and damping coefficients were taken as $1/2 M_0$, $1/2 S$, and $1/2 \zeta$ respectively, and the effect of the magnitude of these parameters on the damping effectiveness was considered. The equations for this system were derived and the solutions were sought in the form

$$\xi = \xi_0 e^{M}, \quad \eta = \eta_0 e^{M}, \quad S = S_0 e^{M}, \quad H = H_0 e^{M}$$

(see Fig. 1 on the Enclosure for nomenclature). The characteristic determinant

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L 63033-65
ACCESSION NR: AP5016232

yielded a characteristic equation (10th power in $r = \lambda/\omega$) which could be solved by a standard digital computer program (on VNIEM-1), in terms of the parameters

$$\varphi = \frac{M_0 \omega^2}{\mu l}, \quad \gamma = \frac{M_0}{M}, \quad v = \frac{\epsilon}{c}, \quad \delta^2 = \frac{x^2}{\epsilon M}, \quad B = \frac{\omega}{\Omega_1} \left(\Omega_1^2 - \frac{\epsilon}{M} \right)$$

Stability curves plotted for the simplified case of a rigid rotor showed that at small B damping is ineffective, for small and medium values of γ best damping effectiveness can be achieved only for $B > 2$, while for large support masses the support stiffness is also limited on the lower end. For the case of an unloaded shaft it was found that for stability the damping is limited by

$$\delta < 1 \text{ for } x^2 < M_s$$

and the speed is limited by

$$B > \frac{2}{\sqrt{1 - \delta^2}} \text{ for } \omega > 2\Omega_1 \sqrt{1 - \delta^2}.$$

For this case it was also found that an optimum stiffness for the supports does not exist but that they should have minimum stiffness. For the case of an elastic shaft it was found that an optimum δ results in maximum damping, that damping is ineffective with large support mass or support stiffness, and that

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L 63033-65

ACCESSION NR: AP5016232

values of β , $\gamma < 1$, and δ close to 1 are recommended. Orig. art. has: 10 figures and 20 formulas.

ASSOCIATION: none

SUBMITTED: 28Apr64

ENCL: 01

SUB CODE: PR, ME

NO REF Sov: 009

OTHER: 004

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L-63033-65
ACCESSION NR: AP5016232

ENCLOSURE: 01

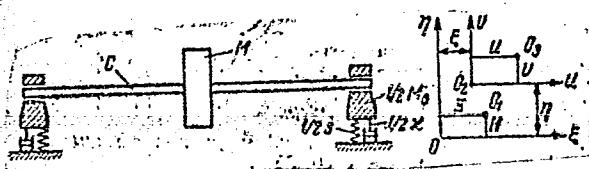


Fig. 1. Shaft geometry

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POZNYAK, E.L., kand.tekhn.nauk

Stability of the movement of complex rotary systems with sliding
bearings. Vest.mashinostr. 45 no.3:9-15 Mr '65.
(MIRA 18:4)

POZNYAK, E.L.; RAYKHLINA, B.

Using an analog computer in determining the characteristics of
sliding bearings. Tren. i izm. v mash. no.12:11-33 '64
(MTA 18:1)

L 10149-63 EWT(d)/EPF(c)/EWT(m)/ES(s)-2/EDS-AFFTC/APGC/SSD--
Pr-4 Pt-4 BW/DJ

ACCESSION NR: AP3000885

S/0179/63/000/002/0102/0119
71
68

AUTHOR: Poznyak, E. L. - (Moscow)

TITLE: Investigation of the stability of motion of rotors on journal bearings

SOURCE: AN SSSR. Izv. Otd. tekhn. nauk. Mekhanika i mashinostroyeniye, no. 2, 1963, 102-119

TOPIC TAGS: bearings, friction bearings, journal bearings, lubrication, rotor-stability boundaries

ABSTRACT: This theoretical paper deals with the problem of the unsteady motion of a journal in a journal bearing, which requires the simultaneous solution of the hydrodynamic problem and the theory of oscillations, of which the solution of the hydrodynamic problem is regarded as the more complex one. V. I. Olimpiyev (Akad. nauk SSSR, Izv., Otd. tekhn. nauk. Mekhanika i mashinostroeniye, no. 3, 1960) investigated a portion of the dynamic characteristics for a cylindrical bearing of finite length. The present author (ibid., no. 6, 1961) examined the problem of the dynamic characteristics of a lubricant film for the particular case of a

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L 10149-63

ACCESSION NR: AP3000885

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cylindrical half-bearing of infinite length. The present paper examines the problem of the determination of the characteristics of bearings of finite length with arbitrary shapes of the bearing surfaces and arbitrary conditions of the introduction and removal of the lubricant fluid under loads that are constant in magnitude and invariable in direction, with the sole stipulation that the axes of the journal and the bearing be parallel. Starting from the equations of transient motion within a thin layer of viscous, incompressible, fluid without any convective components of the inertial forces, the hydrodynamic and vibrational problems are resolved simultaneously by the determination of the supplementary hydrodynamic forces and moments that arise when the journal (rotor) undergoes small displacements from the curve of equilibrium of motion. Following a formulation of basic equations (Section 1) and an analysis of the static characteristics (Section 2) and dynamic characteristics (Section 3), the stability characteristics are then analyzed separately for a rigid rotor (Section 4), a flexible rotor with a single disk placed at the center of the assumedly massless shaft (Section 5), and a flexible rotor with a uniformly distributed mass and flexural stiffness (Section 6). Stability boundaries are traced. There are 77 numbered equations and 12 figures.

Card 2/3

All-Union scientific research inst. of Electromechanics

POZNYAK, E.L. (Moskva)

Investigating the motion stability of rotors in sliding
bearings. Izv. AN SSSR Otd. tekhn. nauk. Mashinostr.
no.2:102-119 Mr-Ap '63. (MIRA 1963)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektro-
mekhaniki.
(Bearings(Machinery))

1. G. POZNYAK
2. USSR (600)
4. Afforestation
7. Leading forestation team. Les khoz. 5. no. 12. 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

REZNIK, G. M.

PHASE I BOOK EXPLOITATION

SOV/5461

Akademiya nauk SSSR. Institut teoreticheskoy astronomii.

Astronomicheskiy yezhegodnik SSSR na 1962 g. (Astronomical Yearbook of the USSR for 1962) Moscow, Izd-vo Akademii nauk SSSR, 1960. 647 p. Errata slip inserted. 2,000 copies printed.

Sponsoring Agency: Institut teoreticheskoy astronomii Akademii nauk SSSR.

Resp. Ed.: M. F. Subbotin, Director of the Institute of Theoretical Astronomy of the Academy of Sciences USSR, Corresponding Member, Academy of Sciences USSR.

PURPOSE: This book is intended for astronomers and geophysicists.

COVERAGE: The Astronomical Yearbook of the USSR for 1962 has been compiled in accordance with changes proposed by the International Astronomical Union to member organizations at its meeting in 1958. In addition to usual

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Astronomical Yearbook (Cont.)

SOV/5461

information on the Sun, Moon, Earth, and planets, the Yearbook contains the ephemerides of the lunar crater Moesting A, which until 1960 were published by the Berliner Astronomisches Jahrbuch, [Berlin Astronomical Yearbook], and whose regular publication has now been undertaken by the Institute of Theoretical Astronomy of the USSR at the request of the Union's Committee on Ephemerides. The solar, lunar, and planetary coordinates in the Yearbook are based on data supplied by the British Nautical Almanac as stipulated by the Astronomical Union. The material in the Yearbook was compiled and prepared by the following scientists: computation of ephemerides of the lunar crater Moesting A on high-speed computer BEMS at the Vychislitel'nyy tsentr AN SSSR (Computer Center AS USSR) - D. K. Kulikov; reduction of solar and lunar ephemerides - A. G. Mai'kova and G. A. Mazing; computation of nutation on high-speed computer BEMS - D. V. Zagrebin, O. M. Gromova and A. Ya. Faletova; computation of reduction values of visible positions of ten-day and near-polar stars - M. B. Zheleznyak and M. A. Fursenko; preparation of original data on visible positions of ten-day and near-polar stars -

Card-2/16

Astronomical Yearbook (Cont.)

SOV/5461

E. A. Mitrofanova (in charge), O. M. Gromova, G. A. Mazing, T. I. Mashinskaya, G. M. Poznyak, K. G. Shumikhina, and P. A. Gutkina; heliocentric coordinates of the large planets - O. M. Gromova, A. G. Mal'kova; reduction values (trigonometric system) - E. A. Mitrofanova, and K. G. Shumikhina; mean positions of stars - E. A. Mitrofanova, M. B. Zheleznyak, O. M. Gromova, K. G. Shumikhina, M. A. Fursenko; solar and lunar eclipses - E. A. Mitrofanova, M. A. Fursenko; planetary configurations - E. A. Mitrofanova, O. M. Gromova; ephemerides for physical solar observations - P. A. Gutkina, T. I. Mashinskaya; ephemerides for physical lunar observations - G. A. Mazing, P. A. Gutkina, K. G. Shumikhina; ephemerides of the illumination of the discs of Mercury and Venus - T. I. Mashinskaya, G. M. Poznyak; ephemerides for physical observations of Mars - G. M. Mazing, T. I. Mashinskaya; ephemerides for physical observations of Jupiter - T. I. Mashinskaya, E. A. Mitrofanova; Saturn's rings - G. A. Mazing, T. I. Mashinskaya; sunrise and sunset - A. I. Frolova; rising and setting of the moon - P. A. Gutkin, and K. G. Shumikhina; altitudes and azimuths of the Polar Star - A. G. Mal'kova

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Astronomical Yearbook (Cont.)

SOV/5461

and K. G. Shumikhina; table for determining latitude by the altitude of the Polar Star - K. G. Shumikhina and P. A. Gutkina; preparation of manuscript for publication - V. G. Kudinova; review and edition of "Explanatory Notes", D. K. Kulikov. There are no references.

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ZAGREBIN, D.V.; MITROFANOVA, E.A.; POZNYAK, G.M.

Determining the difference between the ephemeris and universal
standard time by means of observations of lunar occultations of stars.
Biul. Inst. teor. astron. 6 no.1:57-65 '55. (MIRA 13:3)
(Time--Systems and standards) (Occultations)

POZNYAK, I.

Production committee in a school. Prof.-tekhn. ohr. 20 no.5:5
My '63. (MIRA 16:7)

1. Direktor Minskogo professional'no-tekhnicheskogo uchilishcha
No.8. (Vocational education) (School supervision)

LAVROV, V., starshiy nauchnyy sotrudnik; POZNYAK, I., inzh.

Causes of ice formation in ice boxes. Mor. flot 23 no.6:21-22
Je '63. (MIRA 16:9)

1. Arkticheskiy i Antarkticheskiy nauchno-issledovatel'skiy institut
(for Lavrov). 2. Laboratoriya l'da Arkticheskogo i Antarkticheskogo
nauchno-issledovatel'skogo instituta (for Poznyak).
(Marine engines—Cooling) (Ice crystals)

POZNYAK, I.

According to the new study plans and programs. Prof.-tekhn.
obr. 19 no.5:19 My '62. (MIRA 15:5)

1. Direktor Minskogo tekhnicheskogo uchilishcha No.8.
(Minsk—Vocational education)

POZNYAK, I.I.; POPOV, Yu.N.; SUKHORUKOV, A.Ye.

Research on the building of ice-breaking vessels. Probl.
Arkt. i Antarkt. no. 4:130-138 '60. (MIRA 13:12)
(Ice-breaking vessels)

i

POZNYAK, I.S.

Problem of the pathogenesis of hypochromic anemias in young children.
Pediatriia 23 no. 5:64-70 My '60. (MIRA 14:1)
(ANEMIA)

KISLYAK, N.S.; POZNYAK, I.S.

Syrup of aloe with iron in the treatment of hypochromic anemia
in infants. Pediatriia no.7:41-43 '61. (MIRA 14:9)

1. Iz kafedry fakul'tetskoy pediatrii (zav. - prof. P.A. Ponomareva)
II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova (dir. -
dotsent M.G. Sirotkina).

(ANEMIA) (ALOE) (IRON--THERAPEUTIC USE)

POZNYAK, I.Ya.; KUSTOV, V.N.

Studying the mechanism of the alinger type feeder. Trudy MTKHM
24:ill-120 '62. (MTRA 18:3)

L 15262-65 EWT(m)/EWA(d)/T/EWP(t)/EWP(b) ASD(m)-3/AFETR MJW/JD/JT

ACCESSION NR: AT4048347

S/3000/64/000/009/0005/0014

18

AUTHOR: Poznyak, L. (Candidate of technical sciences); Rogalev, A. M. (Engineer) B

TITLE: Stamp steels and the areas of their use

SOURCE: Moscow. Eksperimental'nyy nauchno-issledovatel'skiy institut kuznechno-pressovogo mashinostroyeniya. Nauchnye trudy*, no. 9, 1964. Shtampovyye stali; sostav, svoystva, termicheskaya obrabotka (Tool steels; composition, properties and heat treatment), 5-14

TOPIC TAGS: steel hardness, steel mechanical property, stamp steel, hammer press, nickel steel/steel 5Kh3GS, steel 5KhGSVF, steel 4Kh3VMF

ABSTRACT: Various steels were tested on horizontal forge presses for hardness, thermostability, and other mechanical characteristics over temperatures ranging from 20-700C in a search for steels, stable without nickel, to be used in hammer presses. Two new steels, made without nickel and designated as 5Kh3GS and 5KhGSVF, and one in which the addition of nickel was optional, 4Kh3VMF, were compared to steels previously in use in the SSSR and to some now in use in Western Europe and the United States. The results are tabulated and graphed against annealing temperature. At high temperatures these steels equalled or surpassed in hardness, resilience, and stability

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L 15262-65

ACCESSION NR: AT4048347

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other steels in use in the SSSR and compared favorably with steels used in the West. Much less work has been done on steels used for cold stamping, but a group of workers under Professor Yu. A. Geller began extensive studies in 1963. For each steel tested, summarized conclusions as to specific possible uses are presented in tabular form. At present, steels used for cold stamping seem to have unsatisfactory stability at high hardness and low heat resistance. Thus, the area for expansion of research seems to be in thermal and thermchemical treatment. Steel 5Kh3GS was prepared by the Moskovskiy institut metallov i splavov (Moscow Institute of Steels and Alloys), 4Kh3VMF by the Zlatoustovskiy metallurgicheskiy zavod (Zlatoustovsk Metallurgical Plant), and 5KhGSVF by the "Bol'shevik" Plant in Leningrad. Orig. art. has: 3 tables and 4 graphs.

ASSOCIATION: Eksperimental'nyy nauchno-issledovatel'skiy institut kuznechno-pressovogo mashinostroyeniya, Moscow (Experimental Scientific Research Institute of Foundry Machinery)

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 010

OTHER: 000

Card 2/2

POZNYAK, L.A., kand.tekhn.nauk.; SHTEYN, F.S., inzh.; ORLOVA, L.M.,
inzh.

Selecting optima temperatures for the hardening of certain die
steels. Metalloved. i term. obr. met. no.10:45-50 O '62.
(MIRA 15:10)

1. Eksperimental'nyy nauchno-issledovatel'skiy institut
kuznechno-pressovogo mashinostroyeniya.
(Tool steel—Hardening)

1622 2412 1981
The nature of intercrystalline breakdown in welds at
high temperatures. B. A. Movchan and I. A. Povnyak,
MG Atomiz. Sverka 7, No. 6, 59-72 (1954).—Results are given
for an investigation of the chem. heterogeneity of a columnar
crystal and its boundaries in a weld. It is shown that there
is a possibility of intercryst. breakdown in the solid coln. at
high temps. obtained during welding. J. R. B.

OK

Inst. Elec. Welding im. Ye.O. Paton, AS USSR

Poznyak, L. A.

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105 On the Nature of Intergranular Cracking of Welds at High Temperature. B. A. Monchenko and L. A. Poznyak. Henry Bratcher Translation No. 3372, 19 p. (Soviet Institute of Automation of Storka, v. 8, no. 6, 1954, p. 59-72.) Henry Bratcher, Altadena, Calif.

Experiments on mechanism of intergranular fracture and on crystallization of chemically heterogeneous alloys, based on microradiography and X-ray diffraction. Chemical heterogeneity of columnar crystallites as a main factor inducing hot cracking; effect of weld metal and flux. Graph, photograph, micrographs, microradiographs, X-ray diffractograms. 27 ref.

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PoZNYAK, L.A.

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1 - Rmt.
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APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001342820016-4"

AID P - 5256

Subject : USSR/Engineering

Card 1/1 Pub. 11 - 7/15

Authors : Movchan, B. A., and L. A. Poznyak (Electrowelding Institute im. Paton)

Title : Radiographic inspection of intracrystalline heterogeneity of sulfur and phosphorus in welded seams.

Periodical : Avtom. svar., 4, 76-87, Ap 1956

Abstract : The authors describe their radiographic research on the dendritic heterogeneity of sulfur and phosphorus in ingots and seams. The effect of cooling rate is discussed. Two tables, 11 photos (radiograms) and 1 graph; Nine Russian references (1950-56) 1 American (1950).

Institution : As above

Submitted : No date

POZNYAK L.A.

ASNIS, A.Te.; DEM'YANCHUK, A.S.; MOVCHAN, B.A.; POZNYAK, L.A.

More on the problem of carbon diffusion toward the surface of
fused metal in oxyacetylene cutting. Avtom. sver. 9 no. 6:83-86
(MLRA 10:3)
N-D '56.

1. Ordona Trudovogo Krasnogo Znameni Institut elektrosvarki im.
Ye.O.Patona. AN USSR.
(Gas welding and cutting) (Diffusion)

SOV/137-58-7-15025 D

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 159 (USSR)

AUTHOR: Poznyak, L.A.

TITLE: Peculiarities of the Intracrystalline Liquation and the Structure of Carbon Steels in Automatic Submerged-arc Welding (Osobennosti vnutrikristallicheskoy likvatsii i struktury svarynykh shvov na uglerodistykh stalyakh pri avtomaticheskoy svarke pod flyusom)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Technical Sciences, presented to the Kiievsk. politekhn. in-t (Kiiev Polytechnic Institute), Kiiev, 1957

ASSOCIATION: Kiievsk. politekhn. in-t (Kiiev Polytechnic Institute), Kiiev

1. Steel--Welding 2. Steel--Structural analysis 3. Arc welding--Metallurgical effects

Card 1/1

POZNYAK, L.A.

Effect of carbon on the dendritic heterogeneity of sulfur
distribution in welded joints. Avtom. svar. 10 no.1:3-7
Ja-F '57. (MLRA 10:4)

1. Ordona Trudovogo Krasnogo Znameni Institut elektrosvarki im.
Ye.O. Patona AN USSR.
(Electric welding--Testing)
(X rays--Industrial applications)

POZNYAK, L.A.

PODGAYETSKIY, V.V.; POZNYAK, L.A.

Effect of flux composition on the distribution of phosphorus
between slag and weld metal. Avtom.svar. 10 no.4:15-18 Jl-Ag '57.
(MIRA 10:10)

1. Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki imeni
Ye.O.Patona Akademii nauk USSR.
(Electric welding) (Phosphorus)

POZNYAK, L.A.

Method for radiographic study of element distribution in welds.
Zav. lab. 23 no.4:436-439 '57. (MLRA 10:6)

1. Institut elektrosvarki im. Ye.O. Patona Akademii nauk USSR.
(Welding--Testing) (Radiography)

Poznyak, L.A.

AUTHOR: Poznyak, L.A.

125-1-12/15

TITLE: Investigations of the Effect of Manganese on the Development of Sulphur Liquation in Welded Seams of Carbon Steel
(Issledovaniye vliyaniya mangantsa na razvitiye likvatsii sery v svarynykh shvakh uglerodistykh stalei)

PERIODICAL: Avtomaticheskaya Svarka, 1958, # 1, pp 80 - 86 (USSR)

ABSTRACT: The author states that investigations are being carried out dealing with the part played by manganese in steel and welded seams. There is, however, an open question of the effect of manganese on sulphur liquation, which has not been treated sufficiently. This problem is investigated in the present article as well as that of the chemical heterogeneity of manganese in the metal of welded seams of low and medium carbon steels.

Three groups of seams with a different carbon content were investigated. The welding was carried out on a) MC_T3 steel, with an average content of 0.11% of carbon in the seams; b) on MC_T3 steel, with a Y-8 steel wire inserted and 0.22 to 0.24% of carbon in the seams; c) on MC_T 45 steel, with a 0.30 to 0.32% carbon content in the seams.

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125-1-12/15

Investigations of the Effect of Manganese on the Development of Sulphur
Liquation in Welded Seams of Carbon Steel

The seams were welded with C_B-OBA rods under AH-348-A
flux, according to the following conditions:

I = 820 to 850 ampere; U_g = 32 to 35 volt; V_{cb} = 27.5 m/h

The radioactive isotope method was the main method of investi-
gation in which a radioactive sulphur S³⁵ isotope was used.
Methods of photometric determination of dendrite liquation
were also applied.

The electrolytic etching method was used to determine the
initial structure of the metal in seams. Micro-X ray photo-
graphy was applied in order to investigate the chemical hete-
rogeneity of manganese.

On the basis of the above mentioned investigations the
author comes to the following conclusions:

The increase of manganese content up to 2.0 to 2.5% in the
seam metal of low carbon steel (0.10 to 0.11% C) does not
lead to a marked change in the sulphur liquation.

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125-1-12/15

Investigations of the Effect of Manganese on the Development of Sulphur
Liquation in Welded Seams of Carbon Steel

In welded seams of medium carbon steel, where the sulphur liquation is 150 - 160%, the increased manganese content tends to reduce the sulphur liquation.

A 1.8 to 2.0% manganese content in the seam metal and an increased carbon content up to 0.33% do not entail changes in sulphur liquation. It amounts to 115 to 125% in all cases.

The increase of manganese content up to 2.5% in metal seams with a carbon content over 0.20% does not prevent the formation of cracks. They were observed in seams with either a high or low manganese content. Micro-X-ray photography has shown that a content of manganese in seams over 1.5% gives rise to chemical heterogeneity in the periphery of crystallites, thus reducing the toughness of the metall.

There are 3 tables, 1 diagram, 3 figures and 13 Russian references.

Card 3/4

125-1-12/15

Investigations of the Effect of Manganese on the Development of Sulphur
Liquation in Welded Seams of Carbon Steel

ASSOCIATION: Institute of Electrowelding imeni Ye.O. Paton (Institut
elektrosvarki imeni Ye.O. Patona) of the Ukrainian SSR
Academy of Sciences.

SUBMITTED: 30 December 1956

AVAILABLE: Library of Congress

Card 4/4

SOV-125-58-10-8/12

AUTHORS: Poznyak, L.A., Zaytsev, Yu.N., and Tikhonovskiy, A.L.

TITLE: Peculiarities of the Structure of Magnesium Cast-Iron Welds in the Electric Slag Welding Process (Osobennosti strukturny svarynykh soyedineniy magniyevogo chuguna pri elektroshlakovoy svarke)

PERIODICAL: Avtomaticheskaya svarka, 1958, Nr 10, pp 67 - 74 (USSR)

ABSTRACT: The authors present information on the investigation of thick magnesium cast-iron joints, carried out by electric slag welding with strip electrodes and different welding power. The tests are described in detail, and the following conclusions are made: the electric slag welding process with strip electrodes can be used in welding magnesium cast-iron if parameters of the welding technology and the electrode composition have been properly selected. It was stated that, contrary to other methods, in electric slag welding, the zone affected by heat is not subject to formation of cementite. The use of magnesium cast-iron

Card 1/2

SCV-125-58-10-8/12

Peculiarities of the Structure of Magnesium Cast-Iron Welds in the
Electric Slag Welding Process

strip electrodes ensures a proper passage of magnesium
into the seam metal to form graphite of a globular shape.
The method provides a satisfactory structure and necessary
hardness of the seam and of the zone of thermal influence.
There are 8 microphotos, 2 tables, 1 graph and 4
Soviet references.

ASSOCIATION: Institut elektrosvarki imeni Ye.O. Patona (Institute
of Electric Welding imeni Ye.O. Paton)

SUBMITTED: April 17, 1958

1. Cast iron-magnesium alloys--Arc welding 2. Arc welding
---Electrodes 3. Arc welding--Metallurgical effects

Card 2/2

125-58-7-11/14

AUTHOR:

Poznyak, L.A.

TITLE:

Peculiarities of Intercrystalline Segregation of Sulfur and Phosphorus in Welded Seams (Osobennosti vnutrikristallicheskoy likvatsii sery i fosfora v svarynykh shvakh)

PERIODICAL:

Avtomicheskaya svarka, 1958, Nr 7, pp 65-71 (USSR)

ABSTRACT:

Sulfur and phosphorus segregation in welded seams was investigated in medium carbon steels by radiography, an electronic microscope and metallography, with the use of radioactive sulfur and phosphorus isotopes introduced through the base metal. The following conclusions are made: 1) if sulfides and sulfide eutectics are present in the weld metal, they are detected by conventional methods (metallography and Bauman imprints); 2) sulfide eutectic formation coating the crystallites in welded carbon steel seams is possible only in the case of a high sulfur content (over 1.0 %); 3) intercrystalline phosphorus segregation in low-carbon steels in the case of a phosphorus content of 0.03 - 0.04 % does not occur; 4) a slight segregation takes place if the P-content exceeds 0.1 %; 5) an increased carbon content in the seam up to and over 0.25 % causes an insignificant phosphorus segregation which is developed more clearly in the upper portion of the seam where crystallization

Card 1/2

125-58-7-11/14

Peculiarities of Intercrystalline Segregation of Sulfur and Phosphorus in
Welded Seams

is slower.

There are 2 tables, 3 photos and 15 Soviet references.

ASSOCIATION: Institut elektrosvariki imeni Ye.O. Patona AN USSR (Institute
of Electric Welding imeni Ye.O. Paton, AS UkrSSR)

SUBMITTED: February 18, 1958

1. Welds--Radiographic analysis
2. Welds--Sulfur effects
3. Welds--Phosphorus effects
4. Sulfur isotopes (Radioactive)--Appli-
cations
5. Phosphorus isotopes (Radioactive)--Applications
6. Electron microscopes--Applications

Card 2/2

18(5),28(1)

SOV/135-59-6-2/20

AUTHOR: Khrenov, K. K., Member, Academy of Sciences (Ukraine),
Poznyak, L. A., Candidate of Technical Sciences, Yuz-
venko, Yu. A., Candidate of Technical Sciences, Samo-
tryasov, M. S., Candidate of Technical Sciences

TITLE: Features of Modification of Seam Welds by Titanium in
the Automatic Welding of Medium Steel

PERIODICAL: Svarochnoye Proizvodstvo, 1959, Nr 6, pp 6-8 (USSR)

ABSTRACT: In welding high carbon-content steels, hot cracks and
tempering structures are formed around the welding
zone. The difficulties are increased
if metal is heated before welding. It is shown in
[Ref 1 and 2] that in metal containing more than 0.16-
0.20% C-hydrate heat-fissures are formed. [Ref 4 and 5]
represent the experiment of introducing fluxes of tit-
anium and aluminum into the welding tub by electrode-
wires. In [Ref 5] there is shown the experiment of re-
moving the heat-fissures in cast steel with a high per-
centage of C-hydrate (0.50-2.0%) by introducing titanium
by powdery-electrodes. The experiment was successful.

Card 1/3

SOV/135-59-6-2/20

Features of Modification of Seam Welds by Titanium in the Automatic Welding of Medium Steel

However, the result was no modification, but an alloy. The author discusses the influence of titanium into the welding tub by electrode-wires and ceramic fluxes. Two series of investigations have been accomplished: 1) The introduction of various quantities of titanium by Sv-0.8 electrodes in welding with AN-348A and AN-20 fluxes; 2) Introduction of titanium by Sv-0.8 electrodes according to GOST 2246-54 of 5 mm diameter, into welding tub with KS-1 ceramic fluxes /Ref 6/. Table 1 and 2 show the chemical structure of seam metal and the presence of fissures. In Photograph 1 the initial structure of the seams is shown. In Photograph 2 the structure of the seams under influence of ceramic fluxes is shown. Table 3 and 4 represent the results of toughness investigations. According to these, modification may be applied: 1) If the melted metal contains small hard parts which can form the center of crystallization after cooling; 2) If a small quantity of admixture which concentrates at the surface when crystallizing and hinders growing,

Card 2/3

SOV/155-59-6-2/20
Features of Modification of Seam Welds by Titanium in the Automatic
Welding of Medium Steel

is introduced into the casting. V. I. Danilov [Ref 10] has discussed the admixture for heating metals. V. M. Maltsev [Ref 13] has been experimenting with the same problem. The author suggests the application of ceramic fluxes containing a modifier for seam-welding with 0.008-0.018% titanium. About 0.5% titanium should be introduced into the weld by electrode-wires. There are 2 photographs, 4 tables, 1 graph and 13 references, 11 of which are Soviet, 1 Japanese and 1 American.

ASSOCIATION: Kiyevskiy politekhnicheskiy institut (Kiyev Politechnical Institute)

Card 5/3

SOV/125-12-2-2/14

18(5,7)
AUTHOR:

Sterenbogen, Yu.A., Poznyak, L.A., and Parfessa, G.I.

TITLE:

Intracrystalline Liquation of Phosphorus in Electric-Welded Joints on Carbonaceous Steel (Vnutrikristallicheskaya likvatsiya fosfora v elektroshlakovykh shvakh na uglerodistoy stali)

PERIODICAL:

Avtomicheskaya svarka, 1959, Vol 12, Nr 2, pp 20-27
(USSR)

ABSTRACT:

The article cites results of radiographic and metallographic research in this field. It is shown that for joints welded in carbonaceous steel, the liquation sectors of phosphorus depend on the quality of electrically-welded joints. It can be assumed that the presence of phosphorus in electro-welded joints causes a reduction in the strength of the metal of the joint. 4 pages are then devoted to research into the distribution of phosphorus in an electro-welded joint, and it is shown that in joints made using the electric arc method beneath the flux, as a result of the high speed of crystallization,

Card 1/3

SOV/125-12-2-1/14

Intracrystalline Liquation of Phosphorus in Electric-Welded Joints
on Carbonaceous Steel

conditions do not exist for the development of intracrystalline liquation of phosphorus, as happens in steel foundry work. Weakly discernible liquation is observed in joints with 0.25% carbon and 0.1% phosphorus. Soviet research demonstrates that an increase in the phosphorus content expands the temperature interval for the crystallization of the metal of the joint and strengthens the structure during primary crystallization which increases the tendency of the seam to form heat cracks. The peculiarities of the crystallization of metal, which are caused by increased phosphorus content cannot, in the authors' opinion, fail to increase the influence of sulphur on the tendency of the metal to form heat cracks. The shock strength of joints in carbonaceous steel can be increased either by reducing the phosphorus content in a given concentration of carbon, or by the fragmentation of the primary structure. The conclusions drawn are first that the uneven distribution of phosphorus in welded joints can be removed by high temperature heating

Card 2/3

SOV/125-12-2-2/14

Intracrystalline Liquation of Phosphorus in Electric-Welded Joints
on Carbonaceous Steel

followed by rapid cooling. Secondly the intracrystalline liquation of phosphorus depends on the carbon content in the joints and on the conditions under which the metal of the welding bath crystallizes. There are 3 tables, 7 diagrams, 1 graph and 7 Soviet references.

ASSOCIATION: Ordena trudovogo krasnogo znameni institut elektrosvarki imeni Ye.O.Patona ~~AN~~ USSR (Order of the Red Banner of Labor Institute of Electric Welding imeni Ye.O.Paton of the AS UkrSSR)

SUBMITTED: December 2, 1958

Card 3/3

18.7200
12.1110
~~18(7), 25(1)~~

80265
S/125/60/000/04/002/018
D042/D006

AUTHOR:

Poznyak, L.A. and Podgayetskiy, V.V.

TITLE:

Research on the Influence of Manganese on the Redistribution of Sulfur Between the Metal and Slag in Welding Low-Carbon Steel

PERIODICAL:

Avtomacheskaya svarka, 1960, Nr 4, pp 5-12 (USSR)

ABSTRACT:

The article describes the results of research on the redistribution of sulfur between the metal of the molten pool and liquid slag in the automatic welding of low-carbon steel under "AN-348A" flux, depending on the manganese content of the weld metal. The composition of the "AN-348A" flux is: 43.6% SiO₂; 38.4% MnO; 4.4% CaF₂; 5.1% CaO; 4.5% MgO; 3.2% Al₂O₃; 0.8% FeO; 0.13% S and 0.06% P. The experiments are described in detail. Sulphur iso-

Card 1/4

80265
S/125/60/000/04/002/012
D042/D006

Research on the Influence of Manganese on the Redistribution of Sulfur Between the Metal and Slag in Welding Low-Carbon Steel

topes were used in the experiments. Measurements of the radioactivity of the metal and slag showed that the increase in the manganese content of the welds intensifies the passage of sulfur from the weld metal to the slag. The following conclusions were drawn. Beginning with a concentration of 1.5% Mn, the product $\frac{\text{Mn}}{\text{Mn}} \frac{\text{S}}{\text{S}}$ becomes approximately constant in the welding pool, showing that the reaction $\text{FeS} + \text{Mn} \rightleftharpoons \text{Fe} + \text{MnS}$ takes place in the molten pool. Desulfuration by manganese of the molten pool metal cannot be the result of the reaction $\text{S} + \text{O}_2 \rightleftharpoons (\text{S}^2-) + \text{O}_2^-$ as manganese decreases the activity of sulfur in metal and is a weak deoxidizing agent. Radiometric investigation

Card 2/4

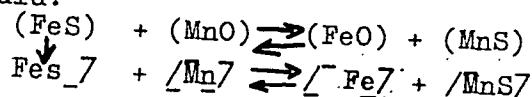
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80265

S/125/60/000/04/002/018
D042/D006

Research on the Influence of Manganese on the Redistribution of Sulfur Between the Metal and Slag in Welding Low-Carbon Steel

shows that the passage of radioactive sulfur from the metal of the molten pool into the slag is proportional to the concentration of manganese in the metal. In these conditions the sulfur passes from the metal into the slag with the manganese as its sulfide. The passage of radioactive sulfur from the slag into the metal does not depend on the concentration of manganese in the welding pool, and in experimental conditions it remains constant within the limits of 21-27%. Sulfur passes from the slag into the metal only with the iron as its sulfide. The distribution of sulfur between the slag saturated with silica and containing oxides of manganese and the liquid steel can be expressed by the formula:



Card 3/4

14

POZNYAK, L.A., kand. tekhn. nauk; ORLOVA, L.M., inzh.; YEVSTRATOVA, V.M., inzh.;
SHTEYN, F.S., inzh.; SHKATOV, A.P., inzh.

Microstructure of certain die steels for the cold and hot forming
of metals and alloys. [Nauch. trudy] ENIKMASHa no.9:73-127 '64.
(MIRA 17:11)

POZNYAK, L.A., kand. tekhn. nauk; ROGALEV, A.M., inzh.

Die steels and their fields of use. [Nauch. trudy] MIZZASHE
no.9:5-14 '64. (MIRA 17:11)

PONIYAK, L.A., kand. tekhn. nauk; SHTEYN, F.S., inzh.; TROFIMOV, N.V. Inzh.

Developing conditions of heat treatment for 81945 and 81941 steels
to be used for cold extrusion tools. [Nauch. trudy] ENIKOLAPKA no.9:
44-51 '64. (MIRA 17:11)

POZNYAK, L.A., kand. tekhn. nauk; ORLOVA, L.M., inzh.

Control of carbide heterogeneity in type X12 steels. [Nauch. trudy]
ENIKMASHA no.9:61-72 '64. (MIRA 17:11)

ACCESSION NR A4021941

BOOK EXPLOITATION

S/

Filimonov, YU. F. (Engineer); Poznyak, L. A. (Candidate of Technical Sciences)

Stamping by extrusion (shtampovka pressovaniyem), Moscow, izd-vo "Mashinostroyeniya", 1964, 187 p. illus., biblio. 5,000 copies printed.

TOPIC TAGS: metallurgy, metal working, extrusion, steel, metalworking equipment

PURPOSE AND COVERAGE: The book describes the features of the process of cold extrusion of steel parts. It cites experience in mastering technology of cold pressing of parts at a number of plants and also analyzes literature data on this question. Various types of designs of dies and rams and the characteristics of the equipment are discussed. The book is intended for engineers and researchers in the field of metal working by pressure; the book can also be used by students in technical higher educational institutions.

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Introduction -- 5	1
Ch. I. Characteristics of the methods of extruding and types of articles made -- 6	1

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ACCESSION NR AM4021941

- Ch. II. Brief theoretical principles of the cold extrusion process -- 16
Ch. III. Initial blanks and preliminary operations before extrusion -- 24
Ch. IV. Engineering features of extrusion of parts -- 45
Ch. V. Quality and precision of extruded parts -- 73
Ch. VI. Dies and rams -- 86
Ch. VII. Materials for the dies -- 107
Ch. VIII. Presses for cold extrusion -- 128
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SUB CODE: MM

SUBMITTED: 11Feb64 NR REF Sov: 057

OTHER: 032

DATE ACQ: 04Jun64

Card 2/2

L 15264-65 EWT(m)/EWA(d)/EWP(t)/EWP(k)/EWP(b)
ACCESSION NR: AT4048349

Pf-l MJW/JD/HW/JT
S/3000/64/000/009/0044/0051

AUTHOR: Poznyak, L. A. (Candidate of technical sciences); Shteyn, F. S. (Engineer); Yesenkova, M. V. (Engineer)

TITLE: Development of conditions for the heat treatment of steels EI944 and EI945, used for cold stamping machines

SOURCE: Moscow. Eksperimental'nyy nauchno-issledovatel'skiy institut kuznechno-pressovogo mashinostroyeniya. Nauchnye trudy*, no. 9, 1964, Shtampovye stali; sostav, svoystva, termicheskaya obrabotka (Tool steels; composition, properties and heat treatment), 44-51.

TOPIC TAGS: steel mechanical property, steel heat treatment, stamp steel, cold stamping/steel EI944, steel EI945

ABSTRACT: Samples of steels EI944 and EI945 of known chemical composition were tested for ability to withstand pressures above 160 kg/mm² during cold stamping. Samples were quenched from no more than 1150-1160C, cooled in oil, and tempered at no more than 550-560C. Quenching was carried out to a secondary hardness at the highest temperatures at which the samples retained a small grain. Data on hardness and the coarseness of the grain are presented both tabularly and graphically and compared with

Card 1/2

L 15264-65

ACCESSION NR: AT4048349

curves for other steels. Tempering at various temperatures and pressures showed the plastic deformation of EI944 and EI945 to be significantly less than that of previously used steels. Therefore, steels EI944 and EI945 may be used to make stamping machines which operate at low and medium temperatures. For optimal working properties of a steel used for cold stamping, the primary hardness must be obtained by tempering at temperatures between 180-200C, at stresses of 20-40 joule/cm² for EI944 and 40-60 joule/cm² for EI945 in a nitrate bath, three times in one hour. "Steels EI944 and EI945 were produced under the auspices of VNIIPP." Orig. art. has: 8 graphs and 4 tables.

ASSOCIATION: Experimental'ny'y nauchno-issledovatel'skiy institut kuznechno-presso-vogo mashinostroyeniya, Moscoe (Experimental Scientific Research Institute of Foundry Machinery)

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 004

OTHER: 000

Card 2/2

FILIMONOV, Yu.F., inzh.; POZNYAK, L.A., kand. tekhn. nauk;
MISOZHNIKOV, V.M., kand. tekhn. nauk, retsenzent; BABENKO,
V.A., inzh., red.

[Forging by extrusion] Shtampovka pressovaniem. Moskva, Ma-
shinostroenie, 1964. 187 p. (MIRA 17:5)

POZNYAK, L.A., kand. tekhn. nauk; SHKATOV, A.P., inzh; STEYN, F.S.;
ORLOVA, L.M.; VLASOVA, A.I.; Prinimalni uchastiye: DANIL'CHENKO,
A.M., tekhnik; GREEBENSHCHIKOV, V.P., tekhnik

Steels used for the manufacture of cold extrusion tools and their
heat treatment. [Nauch. trudy] ENIKMASHa 7:lll-134 '63.
(MIRA 16:7)

(Extrusion (Metals)—Equipment and supplies)
(Tool steel—Heat treatment)

PCZNYAK, L.A., inzh.; SHTEYN, F.S., inzh.; ORLOVA, L.M., inzh.

Evaluating the quality of the heat treatment of die steels by
the actual size of austenitic grains. [Nauch. trudy] ENIKMASHa
(MIRA 16:7)
7:140-147 '63.

(Tool steel—Heat treatment)
(Chromium steel—Metallography)

POZNYAK, L.A.; SHTEYN, F.S.; SOLTYK, V.Ya.; ABRAMOVA, V.P.

Exchange of experience. Zav.lab. 28 no.5:598 '62. (MIRA 15:6)

1. Eksperimental'nyy, nauchno-issledovatel'skiy institut kuznechno-pressovogo mashinostroyeniya (for Poznyak, Shteyn). 2. Institut litteynogo proizvodstva AN USSR (for Soltyk). 3. TSentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya (for Abramova).

(Metals--Testing)

PONIVAK, L.F., aspirantka (Kiyev)

Evaluation of some suturing materials used in surgical stomatology;
an experimental study. Probl. chel.-lits. Fizir. no.1:73-79 '65.
(MIRA 18:10)

L 23304-65 EWP(m)/EWP(w)/EWP(v)/EWP(k) Pf-4 EM
ACCESSION NR: AR4040330 S/0124/64/000/004/V025/V025

SOURCE: Ref. zh. Mekhanika, Abs. 4V157

AUTHOR: Poznyak, L. T.

TITLE: Calculation of frequencies of natural oscillations in bladed discs with naturally curved blades 26 26

CITED SOURCE: Sb. Resheniya inzh. zadach na elektron. vy*chisl. mashinakh. L., 1963, 98-109

TOPIC TAGS: bladed turbine disc, natural oscillation frequency, naturally curved blade, digital computer calculation, chord method

TRANSLATION: The standard method of solving problems on natural values was employed in calculating the frequencies of natural oscillations in bladed discs with naturally curved blades. The roots of the frequency equation were determined by the chord method, as applied to intervals of root distribution defined by trial and error. The author presents the results of calculations on natural oscillation frequencies in an actual turbine stage, programmed for the electronic digital com-

Card 1/2

L 23384-65

ACCESSION NR: AR4040330

puter "Ural-1". V. E. Saren

SUB CODE: PR, DP

ENCL: OO

Card 2/2

CHIZHEVSKAYA, I.I.; GAPONOVICH, L.I.; POZNYAK, L.V.

Mobility of hydrogen atoms in methylene groups of anhydro-2-benzimidazolylmercaptoacetic and β -mercaptopropionic acids. Zhur. ob. khim. 33 no. 3:945-949 Mr 63. (MIRA 16:3)

1. Institut fiziko-organicheskoy khimii AN Belorusskoy SSR.

(Benzimidazoleacetic acid)
 (Propionic acid) . (Hydrogen)

CHIZHEVSKAYA, I.I., GAFANOVICH, L.I.; KUNYIK, L.V.

Lability of hydrogen atoms of the methylene group of benzimidazole
(2',1'-2,3) thiazolidin-4-one. Zhur. ob. khim. 35 no.7:1276-
1280 Jl '64. (MIFB 18-2)

1. Institut fiziko-organicheskoy khimii AN Belorusskoy SSR.

KISEL', I.I., kand.tekhn.nauk; RYBAKOV, I.M., inzh.; POZNYAK, O.G., inzh.

Effect of temperature and rarefaction on the moisture transfer in casting and on the properties of ceramic crocks.
Sbor. nauch. trud. Bel. politekh. inst. no.82:144-148 '60.

(MIRA 15:5)

(Pottery)

(Gypsum)

Poznyak, O.G.

FLASH I BOOK EXPLORATION

300

DAYEN, Leonid Abramovich; PQZNYAK, Pavel Ivanovich; CHERP, Mark
Makarovich; POVOLOTSKIY, A.I.[Povolots'kyi, A.I.], red.;
LEVCHENKO, O.K., tekhn. red.

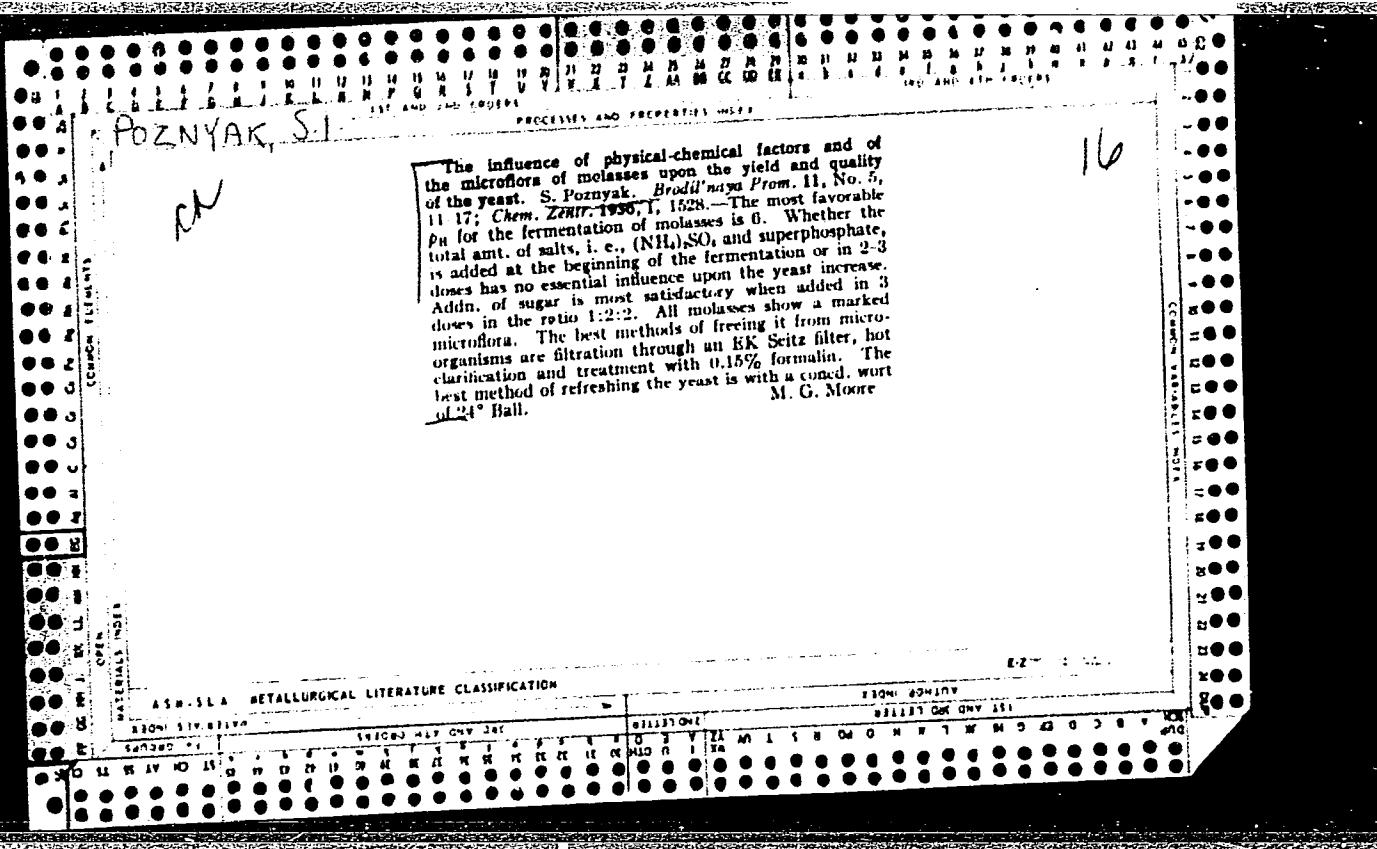
[Kiev; a guidebook and manual] Kyiv; putivnyk-dovidnyk.
Kyiv, Derzh.vyd-vo polit.lit-ry UkrSSR, 1963. 187 p.
(MIRA 17:3)

DAYEN, Leonid Abramovich; MOZNYAK, Pavel Ivanovich; CHERP, Mark
Maksovich

[Kiev; guidebook] Kiev; putesvoditel'-spravochnik. Kiev,
Gospolitizdat USSR, 1963. 187 p. (MIRA 17:10)

DAYEN, Leonid Abramovich; POZNYAK, Pavel Ivanovich; CHERP, Mark
Maksovich; PIVOLOTSKIY, A.I.[Povolots'kyi, A.I.], red.

[Kiev; reference guidebook] : iv; putivnyk-dovidnyk.
Kyiv, Polityvdat Ukrainsy, 1965. 187 p.
(MIRA 19:1)



16.2NTHK, 5-1.

USSR/Chemical Technology. Chemical Products and Their Application -- Fermentation industry, I-27

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6465

Author: Poznyak, S. I., Vladykina, N. M.

Institution: Belorussian Polytechnic Institute

Title: Rapid Method for the Determination of the Moisture Content of Baker's Yeast

Original

Publication: Sb. nauch. rabot Belorus. politekhn. im-ta, 1956, No 55, 109-111

Abstract: Description of a modified method for determining the moisture content of dried yeast by a short duration heating of the sample at a high temperature. A 2-5 g sample of yeast is placed in a shallow dish 10 cm in diameter, on an asbestos plate, in the center of an illuminated circle, over which is located, at a distance of 5-6 cm, a 300 watt electric bulb fastened to a support and connected to the current supply system through a LATR-1, by means of which a constant temperature of 160-165° is maintained at the center of the circle.

Card 1/2

USSR/Chemical Technology. Chemical Products and Their Application -- Fermentation industry, I-27

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6465

Abstract: Total duration of the determination is of 12-15 minutes, including 5 minutes of heating of the sample and 2-3 minutes of cooling it in a desiccator. Determination error, with a 5 g sample of yeast is of <0.3% absolute, or 4% relative in comparison with the method of drying in a drying oven at 105-110° for 5 hours.

Card 2/2

POZNYAK, V., general-leytenant, Geroy Sovetskogo Soyuza

Great achievement of the Soviet people. Voen. znan. 37 no.11:
18-19 N '61. (MIRA 14:11)
(Moscow, Battle of, 1941-1942)

POZNYAK, V., general-leytenant

Major work on the history of the Great Patriotic War ("History of the Great Patriotic War of the Soviet Union, 1941-1945." Vol.1: Imperialist powers prepare for and unleash the war. Reviewed by V. Pozniak. Voen.vest. 40 no.2:121-126 F '61. (MIRA 14:2) (World War, 1939-1945)

PÖZNÝAK, V.G.

LEVCHENKO, G.I., admiral, otvetstvennyy red.; DEMIN, L.A., dots., kand. geogr. nauk, inzh.-kontr-admiral, glavnnyy red.; FJUMKIN, N.S., polkovnik, zamestitel' otvetstvennogo red.; ABAN'KIN, P.S., admiral, red.; ALAFUZOV, V.A., prof., kand. voenno-morskikh nauk, admiral, red.; ANAN'ICH, V.Ye., kontr admirral zapasa, red.; ACHKASOV, V.I., kand. istor. nauk, kapitan 1 ranga, red.; BARANOV, A.N., red.; BELLI, V.A., prof., kontr-admiral v otstavke, red.; BESKROVNYY, L.G., prof., doktor istor. nauk, polkovnik zapasa, red.; BOLTIN, Ye.A., prof., doktor istor. nauk, general-major, red.; VERSHININ, D.A., kapitan 1 kand. voen. nauk, general-major, red.; VITVER, I.A., prof., doktor geogr. nauk, red.; GML'FOND, G.M., dots., kand. voenno-morskikh nauk, kapitan 1 ranga, red.; GLINKOV, Ye.G., inzh.-kontr-admiral v otstavke, red.; YELISEYEV, I.D., vitse-admiral, red.; ZOZULYA, F.V., admiral, red.; ISAKOV, I.S., prof., Admiral Flota Sovetskogo Soyuza, red.; KAVRAYSKIY, V.V. [deceased], prof., doktor fiz.-mat. nauk, inzh.-kontr-admiral v otstavke, red.; KALENSNIK, S.V., red.; KOZLOV, I.A., dots. kand. voenno-morskikh nauk, kapitan 1 ranga, red.; KOMAROV, A.V., vitse-admiral, red.; KUDRYAVTSEV, M.K., general leytenant tekhnicheskikh voysk, red.; LYUSHKOVSKIY, M.V., dots., kand. istor. nauk, polkovnik, red.; MAKSIMOV, S.N., dots., kand. voenno-morskikh nauk, kapitan 1 ranga, red.; OKUN', S.B., prof., doktor istor. nauk, red.; ORLOV, B.P., prof., doktor geogr. nauk, red.; PAVLOVICH, N.B., prof., kontr-admiral v otstavke, red.; PANTELEYEV, Yu.A., admiral, red.; PITERSKIY, N.A., kand. voenno-morskikh nauk, kontr-admiral, red.; PIATONOV, S.P., general-leytenant, red.; PÖZNÝAK, V.G., dots., general leytenant, red.; SALISHCHEV, K.A., prof., doktor tekhn. nauk, general leytenant, red.;

(Continued on next card)

LEVCHENKO, G.I.--(continued) Card 2.
red.; SIDOROV, A.L., prof., doktor istor. nauk., red.; SKORODUMOV,
L.A., kontr-admiral, red.; SNEZHINSKIY, V.A., prof., doktor
voenno-morskikh nauk, inzh.-kapitan 1 ranga, red.; SOLOV'YEV, I.N.,
dots., kand. voenno-morskikh nauk, kapitan 1 ranga, red.; STALBO,
K.A., kontr-admiral, red.; STEPANOV, G.A. [deceased], dots., vitse-
admiral, red.; TOMASHEVICH, A.V., prof., doktor voenno-morskikh
nauk, kontr-admiral v otstavke, red.; TRIBUTS, V.F., kand. voenno-
morskikh nauk, admiral, red.; CHERNYSHOV, F.I., kontr-admiral, red.;
SHVEDDE, Ye.Ye., prof. doktor voenno-morskikh nauk, kontr-admiral,
red.; CHURBAKOV, A.I., tekhn. red.; VASIL'YEVA, Z.P., tekhn. red.;
VIZIROVA, G.N., tekhn. red.; GOROKHOV, V.I., tekhn. red.; GRIN'KO,
A.M., tekhn. red.; KUBLIKOVA, M.M., tekhn. red.; MALINKO, V.I.,
tekhn. red.; SVIDERSKAYA, G.V., tekhn. red.; CHERNOGOROVA, L.P.,
tekhn. red.; GUREVICH, I.V., tekhn. red.; BUKHANOVA, N.I., tekhn.
red.; NIKOLAYEVA, I.N., tekhn. red.; RADOVIL'SKAYA, E.O., tekhn.
red.; TIKHOMIROVA, A.S., tekhn. red.; BELOCHKIN, P.D., tekhn. red.;
LOYKO, V.I., tekhn. red.; ROMANYUK, I.G., tekhn. red.; YAROSHEVICH,
K.Ye., tekhn. red.

[Sea atlas] Morskoi atlas. Otv. red. G.I. Levchenko. Glav. red.
L.A. Demin. [Moskva] Izd. Glav. shtaba Voenno-morskogo flota.
Vol.3. [Military and historical. Pt.1. Pages 1-45] Voenno-istori-
cheskii. Zamestitel' otv. red. po III tomu N.S. Frumkin. Pt.1.
Listy 1-45. 1958. — [Military and historical maps, pages 46-52]
(Continued on next card)

LEVCHENKO, G.I.---(continued) Card 3.

Voenno-istoricheskie karty, listy 46-52. 1957.

(MIRA 11:10)

1. Russia (1923- U.S.S.R.) Ministerstvo oborony. 2. Nachal'nik Glavnogo upravleniya geodezii i kartografii Ministerstva vnutrennikh del SSSR (for Baranov). 3. Chlen-korrespondent Akademii nauk SSSR (for Kalesnik). 4. Deystvitel'nyy chlen Akademii pedagogicheskikh nauk RSFSR (for Orlov).

(Ocean--Maps)

YUSIFOV, V.S., podpolkovnik meditsinskoy sluzhby, kand. med. nauk;
POZNIAK, V.M., gvardii kapitan meditsinskoy sluzhby.

Complications in the treatment with antibiotics. Voen.-med.
shur. no. 1:73 Ja '66 (MIRA 19:2)

POZNYAK, V.M.

Ballistocardiographic changes in mitral stenosis. Klin.med.
37 no.8:74-77 Ag '59. (MIRA 12:11)

1. Iz kafedry fakul'tetskoy terapii No.1 (nach. - prof.V.A.
Beyver) Voyenno-meditsinskoy crdena Lenina akademii imeni
S.M.Kirova.

(MITRAL STENOSIS, physiology)
(BALLISTOCARDIOGRAPHY)

POZNYAK, V.M., gvardii starshiy leytenant meditsinskoy sluzhby

Use of electro- and ballistocardiography in detailed medical examination.
Voen.-med. zhur. no. 7:69-70 Jl '61. (MIR 15:1)
(ELECTROCARDIOGRAPHY) (BALLISTOCARDIOGRAPHY)

ca

Bitumens of the sappropelites from White Russia. B. V.
Rakovskii, V. S. Pernyak, I. G. Shteman and A. V.
Azyavchik. Khim. Tverdogo Toplina 6, 703-9(1935).—

Analyses and discussion of results are given. Five references.
A. A. Podgorny

21

AMERICAN METALLURGICAL LITERATURE CLASSIFICATION

Poznyak, V. S.

Sapropelites

Group composition of saprocoll. Sbor. nauch. trud. Inst. torfa. AN BSSR no. 1, 1951.

9. Monthly List of Russian Accessions, Library of Congress, August 1952, Unc1.

RAKOVSKIY, V.; POZNYAK, V.; RAKOVSKAYA, M.; SHIMANSKIY, V.

Problem of the origin of solid fuels. Trudy Inst.tory. AN BSSR
3:79-94 '54. (MLRA 9;3)
(Peat bogs)

MILANYUK, I. S.

Fuel

✓Chemical composition of some sapropels of the White-Russian S.S.R. V. S. Poznyak and V. E. Rakovskii. *Trudy Inst. Tsvfd, Akad. Nauk Belorus. S.S.R.* 3, 109-19 (1954).—Sapropels of the White-Russian S.S.R. differ from other sapropels (Central belt of the U.S.S.R.) by their low content of humic acids (12-17%) and high content of the nonhydrolyzable residue (16-22%). The analysis of sapropels gave the following data for bog deposits and lake deposits, resp.: ash content 9.94-16.81; 10.50-24.35%; calorific value 6572-6199, 5550-5746; C 53.18-60.87%; H 6.83-66.60%; H 6.37-7.44, 7.40-7.70; N 3.67-5.22, 4.14-4.63%; O + S 20.82-35.93, 31.37-33.77%.

Serge G. Fackelmann

PoZNYAK, V.S.

General chemical characteristics of peats of Byelorussian S.S.R. (White Russia). V. E. Rakovskii, V. S. Poynyak, and V. S. Shimanskii. *Izvest. Akad. Nauk Belorus. S.S.R.* 1955, No. 5, 135-47 (in Russian).—Data are tabulated for 18 different kinds of peat regarding their location, botanical compn., ash (1.11-4.0 and 4.0-12.0% for highland and lowland peat, resp.), degree of decompr. of the org. matter, heat-generating capacity (6400-5600 cal./g. dry org. matter), the amts. of C (49.95-64.52), H (4.84-6.49), N (0.73-4.09), and O + S (29.26-41.54% of the dry org. matter, resp.), and the inorg. compn., expressed in percentages of the abs. dry substance and of the amt. of the ash (the amts. of the inorg. constituents in percentage of the abs. dry peat: SiO₂ 0.49-4.95, Fe₂O₃ 0.11-2.09, Al₂O₃ 0.12-1.85, CaO 0.18-4.97, MgO traces-0.58, SO₃ 0.04-1.15, S 0.02-0.71, and Na₂O + K₂O 0.07-0.67%, resp.). P.W.

Fuel 3

P.2NKA K, V S

✓ 121. COMPOSITION OF PEATS OF THE WHITE RUSSIAN S.S.R. Rakovskii,
V.E. and Poznyak, V.S., and Chaikova, V.B. (Izv. Akad. Nauk Belorusssk. SSR
[Bull. Acad. Sci. Belorussian SSR], 1967, v. 11, p. 1-14) abstract, in ref.
Zh. Khim. (Ref. J. Chem., Moscow), 1967, v. 11, p. 1424. A relationship is
disclosed between the group properties of the S. S. R. (White Russian)
peats and their biological quality for purposes of composting. The cellulose
content of peats is higher than that of humus, and the degree of
decomposition thereof is lower. The degree of decomposition of
easily hydrolysed matter is 1.5-2 times greater than that of cellulose.
The cellulose content of bog peat and forest peat decreases with
increase in the degree of decomposition. The greatest concentration of humic
acids was noted in peat peats (in 40%), at 40% decomposition and above. The
lignin residue content increases with increasing decomposition. In peat peats,
the sum of the humic acids and lignin residue content increases parallel
with the degree of decomposition, reaching a maximum of 30% at 40%
decomposition and above.

POZNYAK, V.S.; RAKOVSKIY, V.Ye.

Lignin in peat. Trudy Inst. torf. AN BSSR 6:80-87 '57. (MIRA 11:7)

(Peat--Analysis) (Lignin)

POZNYAK, V.S.; RAKOVSKIY, V.Ye.

Amount and composition of bitumens in peat. Trudy Inst. torf. AN
BSSR 6:88-95 '57. (MIRA 11:7)
(Peat--Analysis) (Bitumen--Analysis)

RAKOVSKIY, V.Ye.; PETROV, L.K.; GUREJKO, V.S.; GALENCHIK, I.Z.; POZNYAK,
V.S.; KUNASHKEVICH, V.M.; BELYAY, K.I., red.; KORENEVICH, N.P., red.;
VERZAL, A.I., red.; KOROBENNIKOV, Yu.Ye., red.

[Technological arrangement for the production of mineral wool
sheets with sapropel binding material] Razrabotka tekhnologii
proizvodstva plit iz mineral'noi vaty s sapropalevoi sviazkoi.
Minsk, Izd-vo "Zvezda," 1958. 14 p. (MIRA 12:2)
(Mineral wool) (Sapropels)